POS6

IMPACT OF BISPHOSPHONATES ON OSTEOPOROTIC FRACTURES, PATIENT QUALITY OF LIFE AND TREATMENT COSTS: THE CASE OF GERMANY

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OBJECTIVE: Post-menopausal osteoporosis has significant health care costs and impacts quality of life. The objective of this analysis was to assess the cost-effectiveness of risedronate compared to calcium + vitamin D, etidronate, alendronate, and ibandronate in high-risk osteoporotic patients in Germany. **METHODS:** A validated model (Tosteson, 2001) was used to estimate the impact of therapy on hip and vertebral fractures, costs, and quality adjusted life years (QALYs). The analysis included women 70 years with a BMD T-Score of <–2.5 and a history of vertebral fracture, treated over 3 years. The model further simulated downstream costs and QALYs for a 10-year period. Country-specific data included general population mortality, hip and hospitalized vertebral fracture rates, fracture costs, and daily drug prices (risedronate €1.50; etidronate €1.17; alendronate €1.50; ibandronate €1.38). Ibandonate price based on U.S. pricing relative to risedronate, as German pricing not available. Hip and vertebral fracture reductions (risedronate 60%, 49%; etidronate 34%, 37%; alendronate 51%, 47%; ibandronate 0% [No efficacy demonstrated], 52% [Using 62% for efficacy does not change results]) were based on published clinical trials. **RESULTS:** In a cohort of 1000 postmenopausal women with 3 years of treatment the model predicted the following costs, total hip and hospitalized vertebral fractures and QALYs: risedronate (€8.22M, 139, 5451); alendronate (€8.41M, 142, 5447); etidronate (€8.42M, 149, 5441); ibandronate (€9.33M, 159, 5429); calcium + vitamin D (€7.91M, 164, 5427). All bisphosphonates were dominated by risedronate, which was less costly and had better outcomes. Risedronate had a cost per fracture averted of €12,389 and a cost per QALY gained of €13,253, compared to calcium + vitamin D. **CONCLUSIONS:** The analysis favors the adoption of risedronate therapy for the treatment of postmenopausal osteoporosis compared to other bisphosphonates.

POS7

EVALUATION OF DISTRIBUTION OF HIP REPLACEMENT IN HUNGARY ACCORDING TO GEOGRAPHICAL REGIONS AND AGE GROUPS

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OBJECTIVES: The aim of the study is to show the utilization of hip-prosthesis implantations in Hungary according to age groups and geographical regions. **METHODS:** In this retrospective study the data derive from the financial database of the National Health Insurance Fund of Hungary and the database of the Hungarian Central Statistical Office. For the analysis we used the International Classification of Diseases (ICD) tenth revision and the surgical codes of the Hungarian Homogenous Disease Groups related to prosthesis implantations. The study includes all the hip implantations that occur for the first time in the year of 2002 as a one side primary prosthesis, regardless of the status of the opposite hip (such as the coxarthrosis, primary treatment of hip fractures or their prosthesis after changing the methods, other problems). The study does not include the implantation of hip prosthesis on the opposite side within one year, and the prosthesis implanted earlier but having been replaced because of any reasons. **RESULTS:** The total number of patients fulfilled the criteria mentioned above were 8019. The average number of patients with hip prosthesis (either hemi or total) per 10,000 populations was 7.90. According to age-groups: age 10–19: 0.03 case, age 20–29: 0.18 case, age 30–39: 1.01 case, age 40–49: 4.89 cases, age 50–59: 10.46 cases, age 60–69: 23.51 cases, age 70–79: 32.72 cases, aged over 80: 25.21 cases. The number of patients having prosthesis according to the geographical regions per 10,000 population: Central-Hungary: 8.72, Central-Transdanubia: 7.87, Western-Transdanubia: 8.35, Southern-Transdanubia: 8.86, Southern-Greatplane: 8.7, Northern-Hungary: 6.89, Northern-Greatplane: 5.69. **CONCLUSION:** We realized significant regional differences in the utilization of hip implantations. Further studies are needed to explore the causes and factors influencing the regional differences.

POS8

CONTENT VALIDATION OF OSTEOPOROSIS TREATMENT PREFERENCE QUESTIONNAIRE

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Numerous studies have directly assessed patient preferences for different treatments, but have provided little evidence supporting the validity of their preference questionnaires. **OBJECTIVE:** The objective of this study was to perform a qualitative analysis of patients' perspectives of an Osteoporosis Treatment Preference Questionnaire (OTPQ) comparing preferences for once-monthly versus once-weekly administration of bisphosphonate therapy for osteoporosis. **METHODS:** The OTPQ contains one question directly eliciting dosing schedule preference, two questions with multiple items assessing possible reasons for the stated preferences, and a convenience question. Because the OTPQ comprises no multi-item scales and thus psychometric evaluation analyses would be limited, a cognitive debriefing study was conducted as the primary method of assessing validity. This study involved semi-structured one-on-one telephone interviews with a convenience sample of women currently receiving bisphosphonate therapy for postmenopausal osteoporosis. They completed the OTPQ at the beginning of the phone call and subsequently were interviewed about the mental process involved in responding to the questions, their interpretation of the items, and how responses were selected. **RESULTS:** Twenty women completed the interviews. The participants were primarily white (85%), had a mean age of 63.7 years, and most were taking weekly alendronate (85%). In general, participants believed that the OTPQ was easy to understand and appropriate for assessing patient preferences for once-monthly versus once-weekly osteoporosis treatment. One item was not interpreted in a consistent manner among 9 of the first 15 participants. As a result, this item was revised and tested with the remaining five participants. These additional interviews affirmed that the revision clarified the intent of the item. No additional modifications to the questionnaire were required based on the findings. **CONCLUSIONS:** This cognitive debriefing study provided a strong foundation for the content validity of the OTPQ. Such studies should be a critical component in the development of preference questionnaires.